

CLAIMS

What is claimed is:

1. A slider system comprising:
a locking pin movable between an engaged position and a non-engaged position, said locking pin spring biased toward an engaged position by a locking pin return spring;
an actuator for driving said locking pin in opposition to said spring bias toward said non-engaged position;
a first valve in communication with said actuator;
a trailer spring brake control valve in communication with said first valve and an air supply, said trailer spring brake control valve operable to vent said actuator through said first valve such that said locking pin is movable toward said engaged position by said locking pin return spring.
2. The slider system as recited in claim 1, wherein said first valve comprises a hand operated valve.
3. The slider system as recited in claim 1, wherein said actuator comprises an air spring.
4. The slider system as recited in claim 3, further comprising a lever which rotates a torque tube to drive said locking pin toward said non-engaged position, said lever operated by said air spring.
5. The slider system as recited in claim 4, wherein said air spring is constrained by a four-bar linkage.
6. The slider system as recited in claim 3, wherein an auto-reset valve vents said air spring in response to said parking brake controller.

7. The slider system as recited in claim 3, wherein an auto-reset valve deactivates said air spring in response to said parking brake controller.

8. The slider system as recited in claim 1, further comprising a pull-handle which operates said actuator.

9. A method of securing a slider to a trailer comprising the steps of:
- (1) releasing a parking brake;
 - (2) exhausting a pneumatic actuator in response to said step (1); and
 - (3) releasing a spring biasing member biasing a locking pin toward an engaged position in response to said step (2).
10. A method as recited in claim 9, further comprising the steps of:
setting the parking brake;
actuating the pneumatic actuator; and
overcoming the spring biasing member such that a second biasing member biases the locking pin toward a disengaged position.
11. The slider system as recited in claim 9, wherein said step (2) further comprises:
venting the pneumatic actuator through a first valve.
12. The slider system as recited in claim 9, wherein said step (1) further comprises:
venting a trailer spring brake valve in communication with the pneumatic actuator prior to said step (2).
13. The slider system as recited in claim 9, further comprising the steps of:
setting the parking brake;
closing venting a trailer spring brake valve in communication with the pneumatic actuator;
actuating a handle valve; and
pressurizing the actuator through the handle valve from a reservoir.